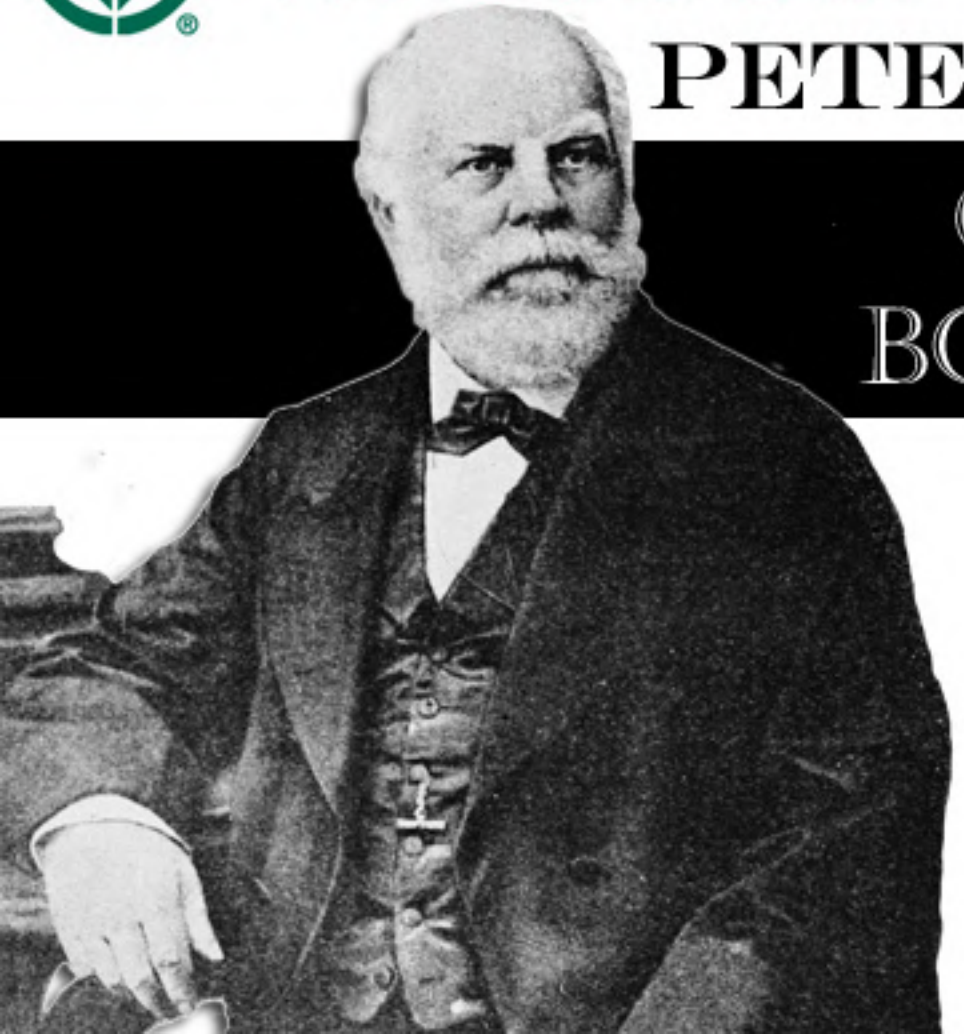
# Missouri Botanical Garden

## Peter H. Raven Library

# George Engelmann Botanical Notebooks



*Pagination Note:*
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what we need is the best plans wrought out by men who believe in them. As matters are, the State has the men, but it has not furnished the means. The appropriation to the North Missouri School ought to be doubled.

"If it be possible to secure a Legislature capable of appreciating the educational needs of the State, it will be seen by such a body that above all should the Normal Schools be fostered and cared for."

## REPORT OF SENATE COMMITTEE.

YOUR COMMITTEE ON EDUCATION, having, as instructed by Senate resolution, visited the Normal School located at Kirksville, with a view of ascertaining its condition and efficiency, respectfully submit the following report:

We visited the institution on Saturday, the 7th inst., examined carefully the classes, the course of instruction pursued in the school, its management, and the condition of the building. We found the school in charge of Professor Baldwin and associate teachers. They are bringing to their aid all their talents, learning and energy in fitting our young men and women for the responsible duty of taking charge of the Public Schools of the State. The number of pupils registered in the school the present year, is 565. They are from nearly every county in the District, and from various other counties throughout the State.

The new building, recently erected, and occupied about one year, is admirably adapted for the purposes of a school of the character of the one at Kirksville. It is beautifully located on a lot of fifteen acres of ground donated by the people of Kirksville for this purpose. It commands a fine view of the surrounding country. It is easy of access from all directions. It will be a credit to the State for all time.

Your Committee were gratified to find the pupils in attendance at this school to be composed of those who are fitting themselves by their own exertions for their profession, and also to be able to say that, although the Normal Schools are comparatively new institutions in the policy of our State, the vigor and talent displayed in the one to which our visit was made, if pursued by all, must soon present their benefits in a manner to be correctly appreciated by the people, and dispel the prejudice against them which, to some extent, now exists.

The system of instruction pursued at this school *compels* the student to think, investigate the subject, and form his own ideas, and give his answers in his own words—a system which we believe admirably adapted to develop all the powers of the mind.

We are convinced that the proper method to make our Common Schools effective and durable, to make them what they were designed to be, and should be, the means of proper education to all the children of the State, they must be placed in charge of those whose education has been directed, with that purpose, by teachers of experience. We believe no more effective aid can be rendered to the Common Schools than by fostering and sustaining the Normal Schools of our State; in other words, we believe that they are but separate branches of the same great system, and that as life is infused into one, it will be necessarily felt in the other. The persons educated at our Normal Schools are rapidly permeating the entire State, and all schools will be more or less benefited.

D. MOORE,
R. H. BROWNE,
WILL. C. RANNEY,
*Committee of Senate.*

Jefferson City, Feb. 18, 1874.



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# CONDITION AND HISTORY.

The past year has been one of unprecedented prosperity. The ratio of increase is much greater than during any preceding year.

The attendance at the Normal Department has been as follows:

| | | | |
|---|---|---|---|
| First Year | 140 | Fifth Year | 434 |
| Second Year | 203 | Sixth Year | 475 |
| Third Year | 263 | Seventh Year | 680 |
| Fourth Year | 321 | | |

## LOCATION.

SITUATED AT KIRKSVILLE, two hundred miles north from St. Louis, this institution is accessible to a large and promising territory, that is rapidly growing in population and in all the elements of thrift. The location is peculiarly fortunate. Kirksville contains about 2,500 inhabitants, three-fourths of whom are uncompromisingly opposed to dram shops and gambling saloons. Since the school opened, no license has been granted to sell liquor in Adair county. The citizens are intelligent, moral and enterprising. They feel proud of the Normal School, and do everything in their power to sustain it. Kirksville is proverbial for good health. Out of so many students from a distance, but three have died while attending school, in the past seven years. Few cases of severe sickness have occurred. Railroad facilities are all that could be desired.

## PLAN.

The following extract is taken from a recent editorial in the *St. Louis Globe*: "The Normal Schools are hardly less important than the University itself. Of these we have five, including the one located in St. Louis, and another which is an integral part of the State University. The capacity of these is set down at 2,000 students, with say 300 annual graduates. In other words, 300 persons carefully trained, not only in a curriculum, but in the best methods of teaching, and who understand teaching as an art, rather than undertake it as an experiment—these are scattered about among the schools, with the certainty of repaying the State an hundred fold for their free education.

"The power and usefulness of a Normal School, more than of any other, depends upon having a Principal of strong individuality, decided views as to methods of teaching, and a will to shape the whole institution. Missouri has had the fortune to secure such men. Prof. Baldwin has built the school at Kirksville from its very inception, and has deeded it to the State. It is almost literally the product of his individual energy and unselfish labor.

"It needs but little knowledge of Normal School work to see that a State can do itself no better service than to generously provide these establishments with the necessary funds, and leave the shaping of the work to the wisdom of well-selected Principals. The age is radical in its views of education, and



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Op. leptocaulis vaginata

June 21 1881

West Texas, Pleasanton

coll. H. D. Hudson

leaves petaloid

2 cm long

pubescent, subdistant

several small setaceous spurs

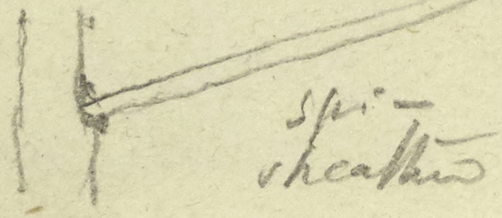
which disappear soon, leaving

only one stout one

loose pendulous

hair in axils,

soon disappearing



spi-

sheaths

Calyx very last shots ?

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Leitch,

& CHEMIST,

Sts. St. Louis.

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Op. leptocaulis

Val Verde Co., Meusebach

June 21 1881

leaves erect.

2–3 c. long.

pubescent; ovate-lanceolate;

scarcely spiny

no hair in axils or areol

remains always weak and short

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Alex. I

APOTHECARY

Cor 4th & Olive

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Hort Dyck Jan 1857

O. gracilis = leptocaulis = pulescens —
Ty from Va — Cayenne Ala Tuscaloosa

O. gracilis, p subpatens is stouter, more hirsutal; some stalk tubercled — almost no spines — possibly = O. vaginata.

O. tamaulipensis seems a distinct species; similar to the last variety; stouter than the other and with very short joints.

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*O. imbricata* is very similar to my *arborescens*, stouter, with more prominent tubercles and rather fewer spines than the specimens raised from my Santa Fe seeds — branches also somewhat ~~to~~ ventricate. — I am strongly inclined to consider them identical. Leaves very long

Invitations
Copies sent Dec, 1879



given in the rudiments of vocal music, with methods of teaching in Primary and Intermediate Schools. In the more advanced courses attention is given to vocal culture, sight reading, practice teaching, and the study of difficult compositions, with methods of teaching in Grammar and High Schools.

## INSTRUMENTAL MUSIC.

The Instrumental Music will continue to be under the immediate supervision of able teachers, The charges are reasonable.

## LATIN AND GERMAN.

The English language is largely dependent upon the Latin for its copiousness, many of its forms, and much of its beauty and inspiration. The Latin is the language not only of philosophy and logic, but of theology and law.

To prepare such of our students as may desire to enter our University; to give a mental discipline not inferior to the study of Mathematics; to enable the student to more easily master the scientific nomenclature of the day; to secure a more thorough knowledge of English; to better cultivate memory, taste, imagination and judgment; and to give a mastery of language which the mere English scholar can never attain, the Regents have established a two years' course in Latin.

The instructor in this department will ever keep these and many othe advantages in view, and no pains will be spared that each pupil shall know how to study the language without the aid of the living teacher.

In our country, where the German element constitutes so large a proportion of our population, a knowledge of the German language has become a necessity. Besides, no living language is so great a contributor to the English as the German; and surely none possesses a literature so extensive and so valuable. Opportunity will, therefore, be furnished all who may desire to pursue this very useful branch of a modern education.

## GENERAL CULTURE.

READING ROOM.—Through the liberality of publishers, we have been able to sustain a valuable reading room. Students are encouraged to familiarize themselves with the living present.

LITERARY SOCIETIES.—Eight literary societies are sustained. Each student is expected to be a member of one of these societies.

LECTURES.—A course of lectures of great interest has been delivered in our large hall, in which one thousand auditors can be comfortably seated. In accordance with the plan of Superintendent Monteith, we are arranging for a similar course of lectures each year.

FOUR LIBRARIES have been commenced. Though small, we find them a great help.

GENERAL LIBRARY.—By purchase and by donations we have secured about one thousand volumes, mostly choice standard works. The library is free to all students. No effort will be spared to build up a library worthy of the great State of Missouri.



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REFERENCE LIBRARY.—This is a separate library, kept in a separate room. We have secured the American Encyclopædia, several Dictionaries, and many leading text-books. The aim is to make this the most extensive library of the kind in the West. Through the liberality of publishers, we hope to secure all the most important text-books published in this country and Europe.

PROFESSIONAL LIBRARY.—This is kept in the Principal's room, and is designed to embrace all books and reports that can aid teachers.

From the Text-Book Library Room, which opens into the Assembly and Study Rooms, and is accessible at all hours, students can procure books at wholesale prices.

It is found better to have students *own* their books. To reduce the cost to the minimum seems to be a necessity. This arrangement, it is believed, will give better satisfaction than any other.

APPARATUS.—Several hundred dollars have been expended in the purchase of apparatus. Although the supply is small, it embraces the articles necessary for most of the philosophical and chemical experiments given in the ordinary text-books. Additions will be made each year, as circumstances seem to require.

In Chemistry, experiments are performed by the students. Our Laboratory will be as complete as it is possible to make it. Pains will be taken to show how many of the important and leading principles of science can be taught and illustrated by means of simple and inexpensive apparatus. This is deemed necessary, as we are preparing teachers mainly for public schools, in which they will have but little apparatus.

CABINET.—The Cabinet Room is one of the best in the country; it is 85 feet long and 34 feet wide, with office rooms attached.

A beginning in this department has been made, and it is hoped that friends of the Institution will make some effort to procure specimens and help build up this valuable aid. All donations will be registered, together with the name of the donor and locality of the specimen presented.

DONATIONS.—We return our warmest thanks to donors, for valuable contributions to our Libraries, Reading Room and Cabinet, and respectfully solicit additional favors.

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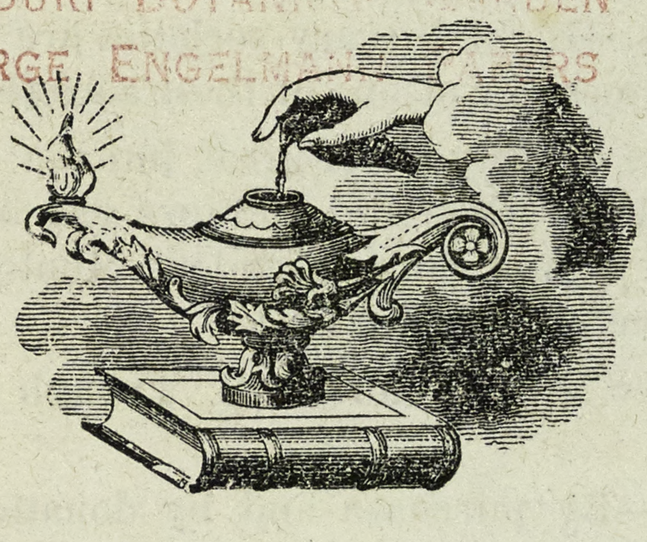



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Opuntia fulgens Aug 3d 1878
from Texas
cult in my garden

leaves 6-7 in long, on
on vigorous shoots
leaves ascending

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**ARTHUR T. HOLLISTER,**

Druggist,

301 South Fifth, S. W. Cor. 5th & Myrtle, St. Louis, Mo.

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℞

Opuntia fulgens or leptocaulis
flowers open towards noon, close at evening;
open only one day. Sandwig Parry. Jan 11 1847

Opuntia fulgens flowers only one day
opens between 9 & 12 o'clock, usually to 1 o'clock
and closes regularly about 6 P.M
sometimes even earlier —

Otto Ludwig Luis Antonio Jaeger

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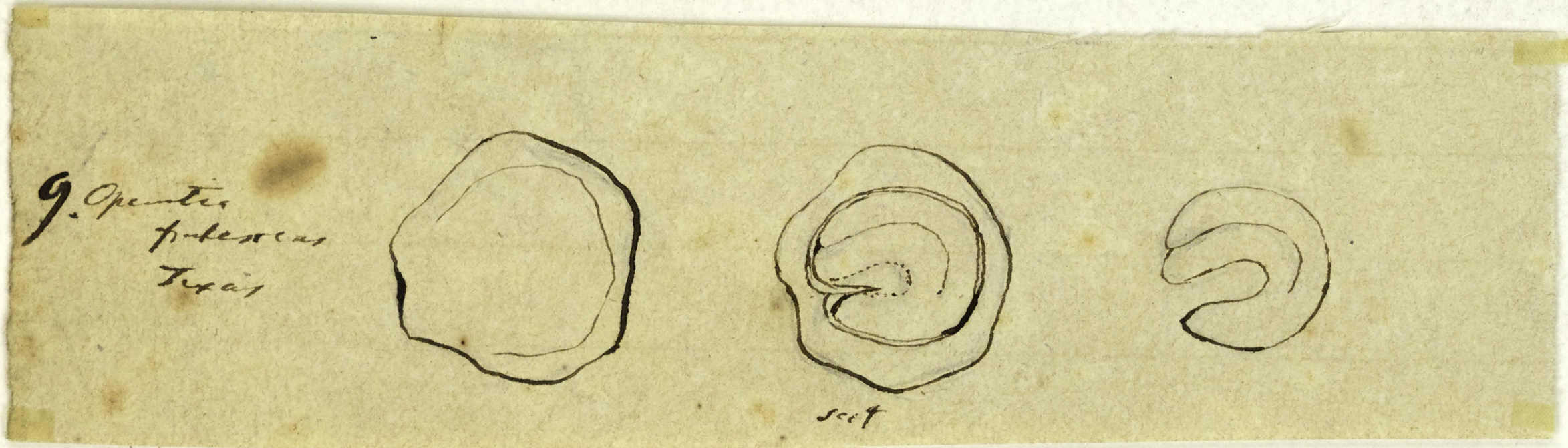
2699.

West Chester June 29. 98

Dear Dr.-

Your corrections were received and entered, in good shape. I will send you proof of your Article & I have also written

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Paris March 1869

Opuntia futeseens  Dr Weber's accot!

known under many different names in cultivation.

Dr Weber finds it common throughout Mexico

and has preserved specimens of wood, half an inch or more in thickness, and <u>reticulated</u>, not solid like my Texas wood — another species?

But his fruit and seed is exactly like mine, fruit red, small, fleshy, and seed somewhat marginal — flowers small and yellow.

Of the flowers he remarks that they are half open ("petals dressés") probably unopened in day time, but (noticed in <u>one</u> night march) at night they are not closed, but <u>recurved</u> or reflexed!

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No 3.

Lexas

Dr. Lindheimer

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Op. fenestratum

Lindheim 1847

Jan 26 1875

x4

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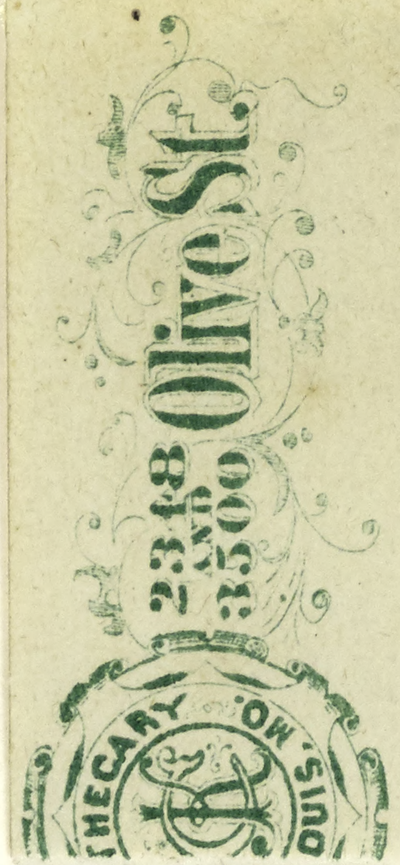


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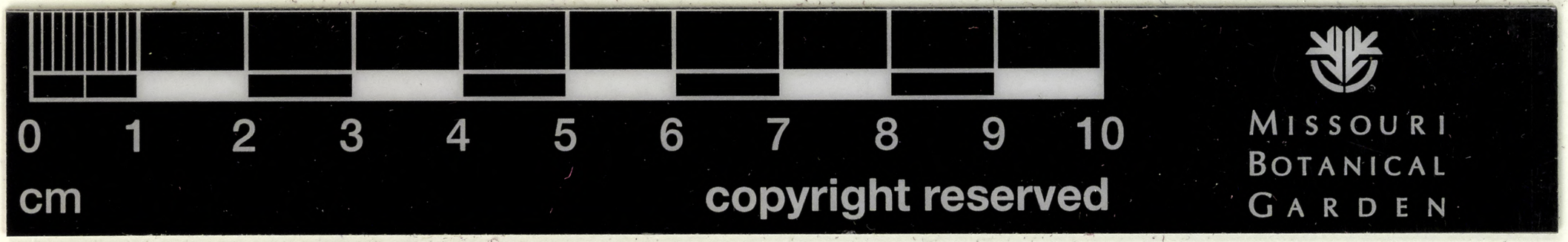
Op. Cylindraceum : in Hort Dyck Jan 1857

Op. patescens, leptocaulis & gracilis do not seem to differ

Op. ramulosum is much more closely branched, & has smaller and perhaps thicker leaves — but it is extremely similar

leaves of Op. cylindr



Op. texanum is very much like Op. Bigelovii, but [illegible] all these species (Bigelovii fulgida, & polifera) possibly belong to tuna-ts. — The tubercles of a well formed Op. [illegible]

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2704

Hort Dyck. Jan 1857

Opuntia macrocarpa seems a distinct species, similar to "O. Engelmanni" but stouter than the others - and with very short joints

on Tuesday last, and as I
one before the 22nd, can
to be at my office again,
at 4 O'Clock. I have w
and invited him to be on h

Yo

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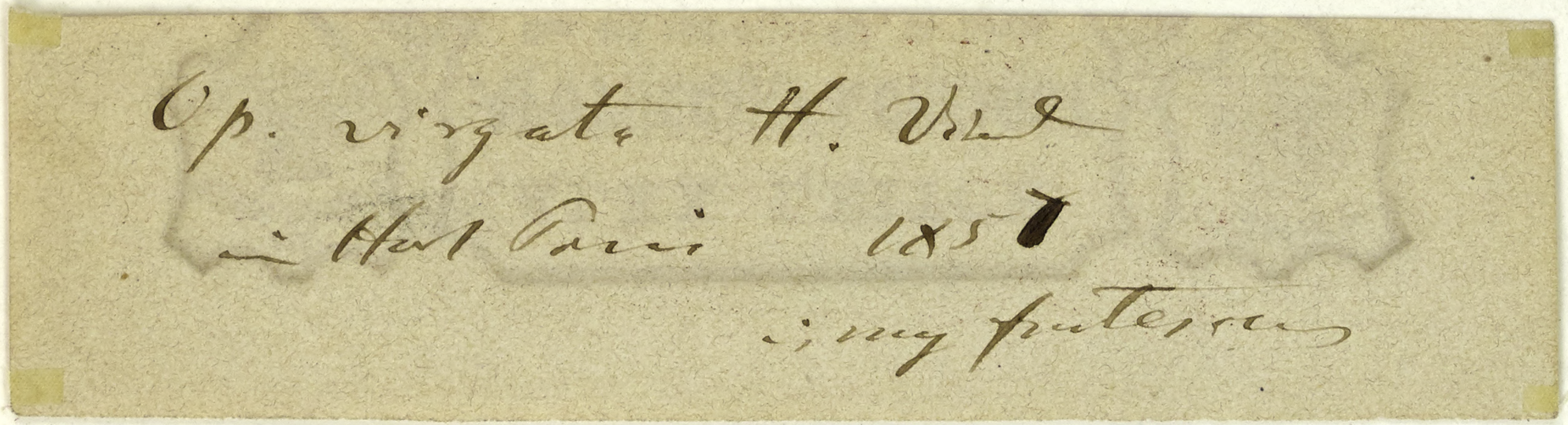
Op. virgata H. Vind
in Hort Paris 1857
in my Herbarium

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*Opuntia virgata* same as my *Puteresens* spin is

H.B. Verbt *longiorribes* ; an old bushy plant with

Jan 1858 stem nearly 3/4 inch thick ; plant 5 feet high.

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Opuntia platyacantha

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Notes on Cactaceae

in Hort Kiehl.

16 Jan 1858

Opuntia from Aldan in Chili seed sent by Phi Cippi is not different from my specimens long spined (olim vaginata)

2708

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March 28 1876

1829. Opuntia leptocaulis DC March 28 1876

is the earliest name of this group, DC. Rev. Cact. 1829 p. 118.

sent by Coulter from Mex. 10

1834 O. ramulifera Salm Hort Dyck cult.

1837 O. gracilis Pfeiff. Cact. 1837

" O. virgata Hort Doveri, nom in Pfeiff = gracilis

1845 O. fruticosa Engelm. in Bot Journ.

1848 O. vaginata Eng. in Wislizen Report.

1837 Pfeiffer admits O. gracilis, leptocaulis & ramulifera

1849 Salm " O. gracilis, leptocaulis, fruticosa & ramulifera

1853 Labouret. " " " "

Supposing that ramulifera may be distinct, it is probable that all the others belong together and will have to bear the name of O. leptocaulis & that vaginata is probably nothing but a stouter form with larger fruit.

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2709

St. Louis Jan. 13/76

Dr. Engelmann

City

I enclose check for $360.00 in payment of bill for medical attendance in my family for last year.

I take this opportunity to express to you my sincere acknowledgement of your your kind attention to Mrs. Gauss.

Very truly yours

C. L. Gauss.

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